

Public Health Preparedness and Situational Awareness Report: #2019:39

Reporting for the week ending 09/28/19 (MMWR Week #39)

October 4th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

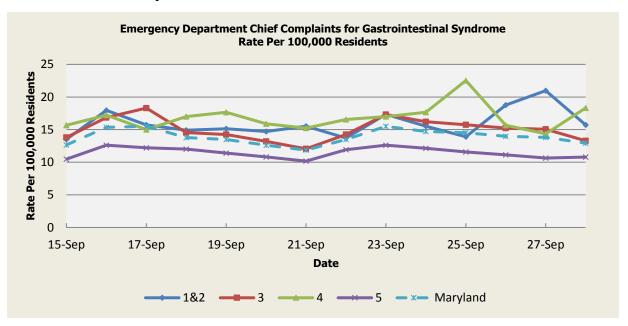
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

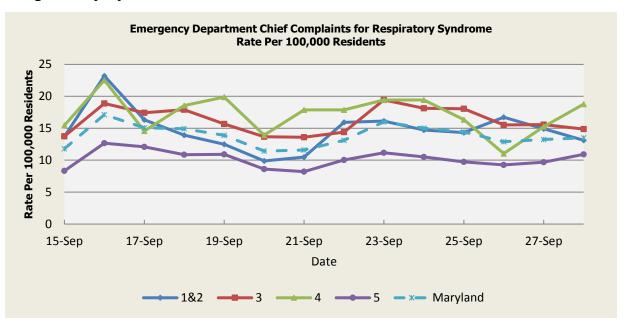


There were two Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis in a Hospital (Regions 4), one (1) outbreak of Scombroid Poisoning associated with a Restaurant (Region 4)

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.30	15.09	15.93	10.26	13.15		
Median Rate*	13.11	14.87	15.46	10.17	13.02		

^{*} Per 100,000 Residents

Respiratory Syndrome

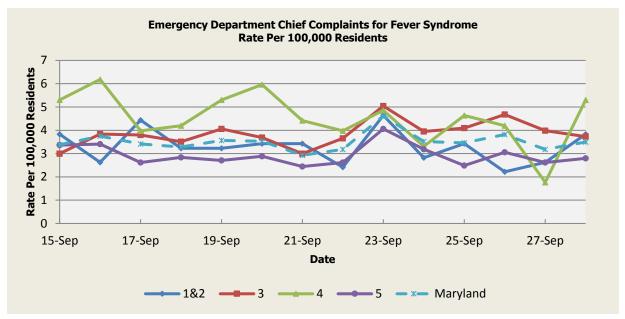


There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.61	14.70	15.04	9.94	12.73		
Median Rate*	12.10	14.14	14.35	9.60	12.24		

^{*} Per 100,000 Residents

Fever Syndrome

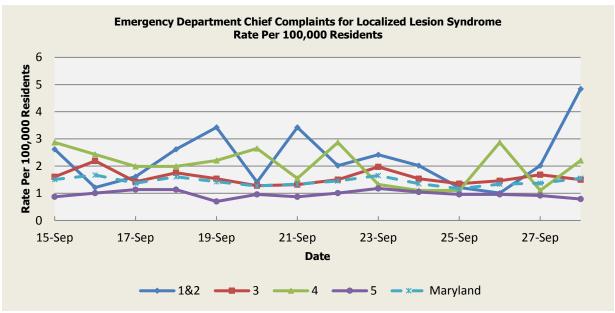


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.90	4.12	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

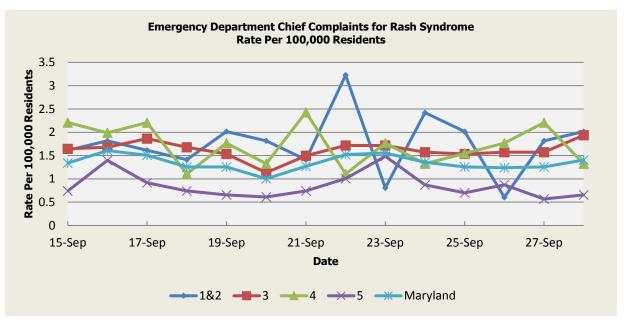


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.16	1.79	2.05	0.91	1.42		
Median Rate*	1.01	1.72	1.99	0.87	1.37		

^{*} Per 100,000 Residents

Rash Syndrome

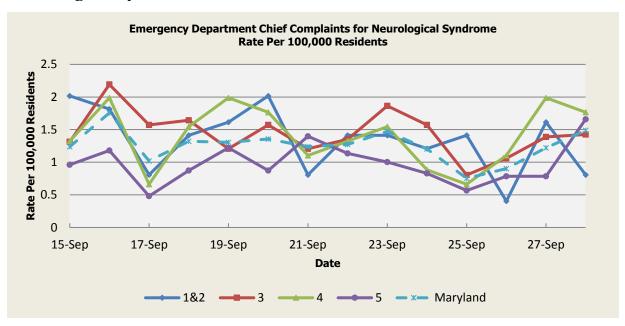


There was one Rash Syndrome outbreaks reported this week, one (1) outbreak of Scabies in a Nursing Home (Region 1&2).

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.25	1.68	1.77	0.98	1.38	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

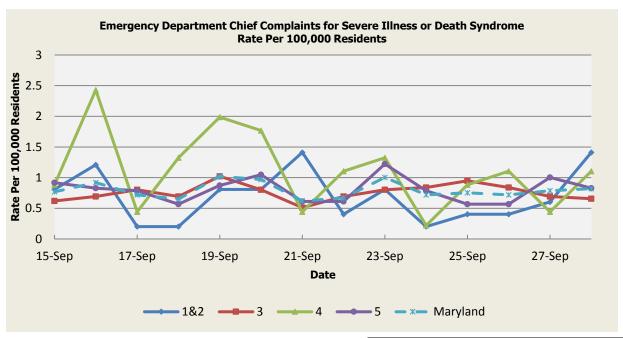


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.78	0.95	0.87	0.61	0.80	
Median Rate*	0.81	0.88	0.66	0.57	0.72	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



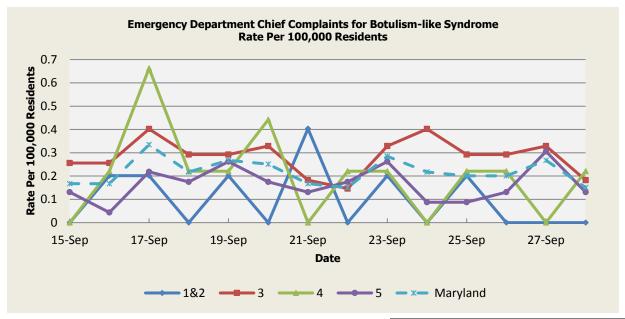
There were no Severe Illness or Death Syndrome outbreaks reported this week.

		Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Не	alth Region	1&2	3	4	5	Maryland			
N	Iean Rate*	0.66	0.90	0.83	0.52	0.73			
Me	edian Rate*	0.60	0.84	0.66	0.48	0.70			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

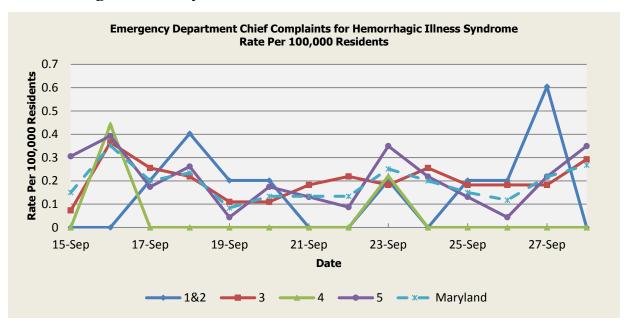


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on, 9/15 (Region 3), 9/16 (Regions 1&2,3,4), 9/17 (Regions 1&2,3,4,5), 9/18 (Regions 3,4,5), 9/19 (Regions 1&2,3,4,5), 9/20 (Regions 3,4,5), 9/21 (Region 1&2), 9/22 (Regions 4,5), 9/23 (Regions 1&2,3,4,5), 9/24 (Region 3), 9/25 (Regions 1&2,3,4), 9/26 (Regions 3,4), 9/27 (Regions 3,5), 9/28 (Region 4). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.06	0.08	0.10	
Median Rate*	0.00	0.11	0.00	0.04	0.08	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

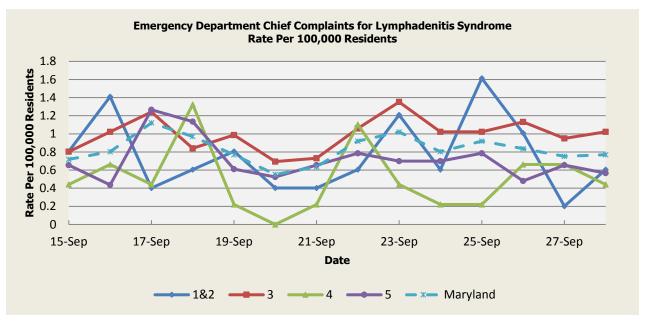


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on, 9/15 (Region 5), 9/16 (Regions 3,4,5), 9/17 (Region 1&2), 9/18 (Regions 1&2,5), 9/19 (Region 1&2), 9/20 (Region 1&2),9/23 (Regions 1&2,4,5), 9/25 (Region 1&2), 9/26 (Region 1&2), 9/27 (Region 1&2), 9/28 (Region 5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.11	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on, 9/15 (Region 1&2), 9/16 (Region 1&2), 9/17 (Region 5), 9/18 (Regions 4,5), 9/19 (Region 1&2), 9/22 (Regions 4,5), 9/23 (Regions 1&2,3), 9/25 (Regions 1&2,5), 9/26 (Region 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.38	0.59	0.40	0.38	0.48		
Median Rate*	0.40	0.51	0.44	0.35	0.44		

^{*} Per 100,000 Residents

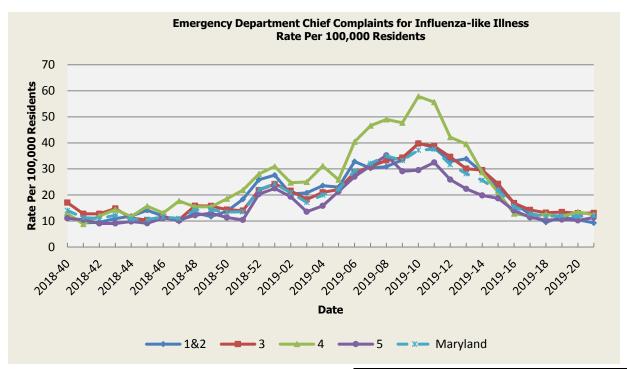
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

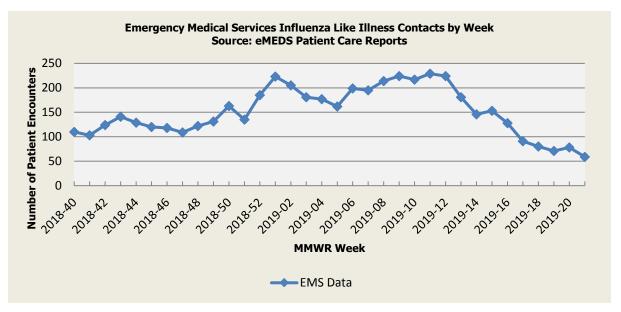
Influenza-like Illness



	Influenza-like Illness Baseline Data						
	Week 1 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	10.15	13.24	12.76	11.22	12.18		
Median Rate*	7.66	10.19	9.27	8.69	9.34		

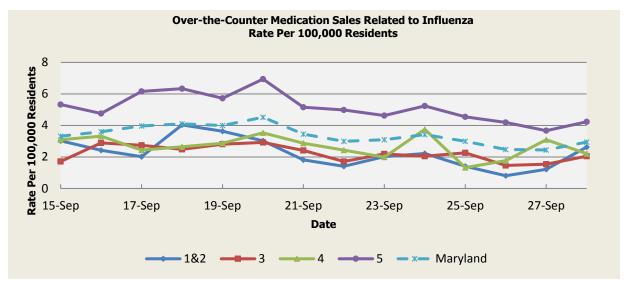
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

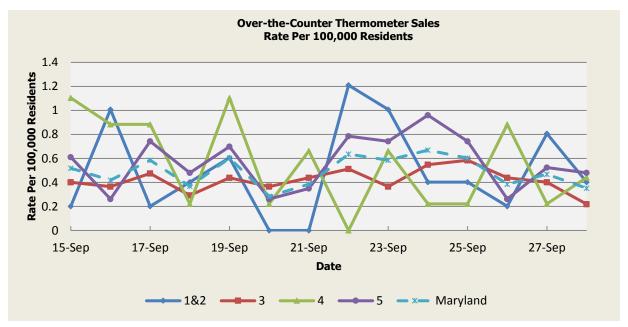


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

_	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.46	4.46	2.67	7.81	5.52
Median Rate*	2.82	3.62	2.21	7.07	4.78

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.94	2.80	2.23	3.72	3.13
Median Rate*	2.62	2.70	2.21	3.67	3.06

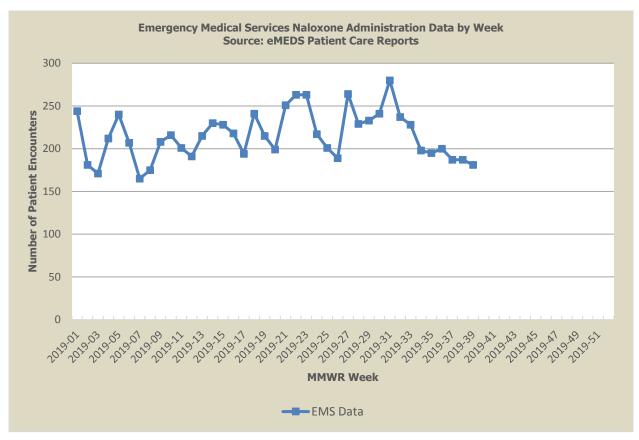
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

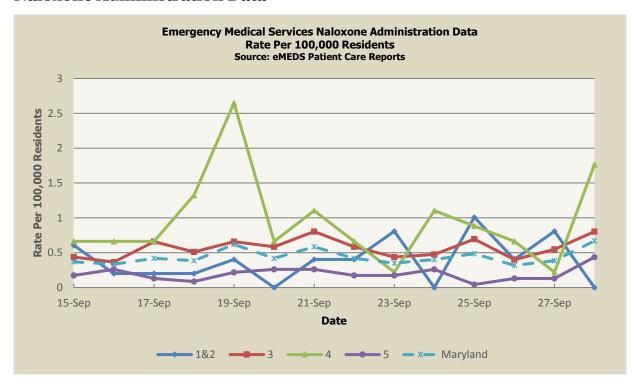
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 3rd, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

VAPING RELATED ILLNESS (MULTISTATE), 4 Oct 2019, Illnesses and deaths linked to vaping continue to increase around the country, now totaling 1080 cases and 19 deaths, health officials said on [Thu 3 Oct 2019]. Read More: https://www.promedmail.org/post/6708832

EASTERN EQUINE ENCEPHALITIS (MULTISTATE), 4 Oct 2019, According to the state, there have been 9 cases of EEE confirmed in residents of Barry, Berrien, Calhoun, Cass, Kalamazoo, and Van Buren counties, including 3 deaths. Read More: https://www.promedmail.org/post/6708752

HEPATITIS C (**WEST VIRGINIA**), 2 Oct 2019, West Virginia Health Department data reveals hepatitis C cases in the state's largest county have soared to the highest numbers in years,

months after a program offering clean needles was suspended. Read More: https://www.promedmail.org/post/6705643

CYCLOSPORIASIS (MULTISTATE), 2 Oct 2019, An outbreak of _Cyclospora_ illnesses linked to fresh basil appears to be over, according to the Food and Drug Administration [FDA] and the Centers for Disease Control and Prevention. Read More: https://www.promedmail.org/post/6705099

EASTERN EQUINE ENCEPHALITIS (MASSACHUSETTS), 2 Oct 2019, The Massachusetts Department of Public Health announced the 11th human case of eastern equine encephalitis [EEE] virus infection, a man in his 70s from Worcester County. Read More: https://www.promedmail.org/post/6702875

LEGIONELLOSIS (**NORTH CAROLINA**), 29 Sept 2019, On Friday [27 Sep 2019], Buncombe County Health and Human Services (BCHHS) reports 20 confirmed cases of Legionnaires' disease in the county, including one fatality, as of 5 p.m. on Thursday [26 Sep 2019]. Read More: https://www.promedmail.org/post/6700738

CAPNOCYTOPHAGA CANIMORSUS (**WISCONSIN**), 28 Sept 2019, a gravely ill patient lost parts of his arms and legs, as well as the skin of his nose and part of his upper lip from Capnocytophaga, a germ from his dogs (Ellie) mouth or from another dog he encountered. Read More: https://www.promedmail.org/post/6699606

TUBERCULOSIS (**WASHINGTON**), 27 Sept 2019, Point Defiance Zoo & Aquarium [Tacoma, Washington] officials said they are taking extra steps to ensure the health and safety of their staff, visitors, and animals after some staff members who work with and around elephants tested positive for latent tuberculosis (TB) infection. Read More: https://www.promedmail.org/post/6697446

VAPING RELATED ILLNESS (MULTISTATE), 27 Sept 2019, The number of cases of vaping-related illnesses spiked sharply again this week [week of 23 Sep 2019] as pressure mounts to uncover the cause of the mysterious symptoms. Read More: https://www.promedmail.org/post/6696977

LEAD POISONING (NEW YORK), 27 Sept 2019, Cattle raised for milk and meat can consume lead through their environments or feed. Some of the lead can contaminate products of those animals, especially milk and organ meats. Read More: https://www.promedmail.org/post/6696894

INTERNATIONAL DISEASE REPORTS

LISTERIOSIS (**EUROPE**), 3 Oct 2019, A total of 13 people were part of a _Listeria_ outbreak after eating liver pâté in Austria at the end of this past year and 1 person died. Read More: https://www.promedmail.org/post/6707785

CRITHIDIA (**BRAZIL**), 3 Oct 2019, The 63-year-old patient initially sought treatment for the symptoms of visceral leishmaniasis, including weight loss, fever, anemia, and an enlarged liver and spleen. Read More: https://www.promedmail.org/post/6707368

TRYPANOSOMIASIS (**SOUTH AFRICA**), 2 Oct 2019, A 23-year-old male international student, who has been studying in South Africa since late July 2019, felt unwell and noticed a lesion on his chin. Read More: https://www.promedmail.org/post/6704899

WEST NILE VIRUS (BANGLADESH), 29 Sept 2019, A new mosquito-borne virus, West Nile Virus (WNV), has been found in Bangladesh. However, detailed information about the virus has not been available yet as the government's concerned department didn't investigate to know its origin. Read More: https://www.promedmail.org/post/6700378

SALMONELLOSIS (**NETHERLANDS**), 28 Sept 2019, About 30 people are part of a _Salmonella_ outbreak in the Netherlands linked to eggs from Spain. Read More: https://www.promedmail.org/post/6699492

VAPING-RELATED ILLNESS (CANADA), 28 Sept 2019, Quebec has reported its 1st case of severe lung disease linked to vaping, the provincial health ministry has confirmed. Read More: https://www.promedmail.org/post/6699608

YELLOW FEVER (AFRICA), 28 Sept 2019, On 16 Jul 2019, the Ebonyi State Ministry of Health received information about suspected yellow fever cases in Ndingele ward, Izzi local government area (LGA), Nigeria. Read More: https://www.promedmail.org/post/6698962

LEGIONELLOSIS (**ENGLAND**), 28 Sept 2019, An air conditioning cooling tower is to blame for an outbreak of Legionnaires' disease that landed 6 people in the hospital in a single south-central London neighborhood, public health officials announced Thursday. Read More: https://www.promedmail.org/post/6698918

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

